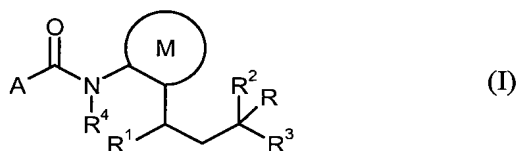


Patent Claims

1. Haloalkyl carboxamides of the formula (I)



5 in which

R stands for hydrogen or halogen,

R¹ stands for hydrogen or methyl,

R² stands for methyl, ethyl or C₁-C₄ haloalkyl with 1 to 9 fluorine, chlorine and/or bromine atoms,

10 R³ stands for halogen or C₁-C₄ haloalkyl with 1 to 9 fluorine, chlorine and/or bromine atoms,

R⁴ stands for hydrogen, C₁-C₈ alkyl, C₁-C₆ alkylsulfinyl, C₁-C₆ alkylsulfonyl, C₁-C₄-alkoxy-C₁-C₄-alkyl, C₃-C₈ cycloalkyl; C₁-C₆ haloalkyl, C₁-C₄ haloalkylthio, C₁-C₄ haloalkylsulfinyl, C₁-C₄ haloalkylsulfonyl, halo-C₁-C₄-alkoxy-C₁-C₄-alkyl, C₃-C₈ halocycloalkyl with 1 to 9 fluorine, chlorine and/or bromine atoms in each case; formyl, formyl-C₁-C₃-alkyl, (C₁-C₃ alkyl)carbonyl-C₁-C₃-alkyl, (C₁-C₃ alkoxy)carbonyl-C₁-C₃-alkyl; halo-(C₁-C₃ alkyl)carbonyl-C₁-C₃-alkyl, halo-(C₁-C₃ alkoxy)carbonyl-C₁-C₃-alkyl with 1 to 13 fluorine, chlorine and/or bromine atoms in each case;

20 (C₁-C₈ alkyl)carbonyl, (C₁-C₈ alkoxy)carbonyl, (C₁-C₄-alkoxy-C₁-C₄-alkyl)carbonyl, (C₃-C₈ cycloalkyl)carbonyl; (C₁-C₆ haloalkyl)carbonyl, (C₁-C₆ haloalkoxy)carbonyl, (halo-C₁-C₄-alkoxy-C₁-C₄-alkyl)carbonyl, (C₃-C₈ halocycloalkyl)carbonyl with 1 to 9 fluorine, chlorine and/or bromine atoms in each case; or -C(=O)C(=O)R⁵, -CONR⁶R⁷ or -CH₂NR⁸R⁹,

25 R⁵ stands for hydrogen, C₁-C₈ alkyl, C₁-C₈ alkoxy, C₁-C₄-alkoxy-C₁-C₄-alkyl, C₃-C₈ cycloalkyl; C₁-C₆ haloalkyl, C₁-C₆ haloalkoxy, halo-C₁-C₄-alkoxy-C₁-C₄-alkyl, C₃-C₈ halocycloalkyl with 1 to 9 fluorine, chlorine and/or bromine atoms in each case,

30 R⁶ and R⁷ stand independently of one another in each case for hydrogen, C₁-C₈ alkyl, C₁-C₄-alkoxy-C₁-C₄-alkyl, C₃-C₈ cycloalkyl; C₁-C₈ haloalkyl, halo-C₁-C₄-alkoxy-C₁-C₄-alkyl, C₃-C₈ halocycloalkyl with 1 to 9 fluorine, chlorine and/or bromine atoms in each case,

R⁶ and R⁷, moreover, form a substituted, saturated heterocycle with 5 to 8 ring atoms together with the nitrogen atom to which they are bound, with single or multiple, the same or various substitution by halogen or C₁-C₄ alkyl, whereby the

heterocycle can contain 1 or 2 additional, non-adjacent hetero atoms constituted by oxygen, sulfur or NR¹⁰,

R⁸ and R⁹ stand independently of one another for hydrogen, C₁-C₈-alkyl, C₃-C₈ cycloalkyl; C₁-C₈ haloalkyl, C₃-C₈ halocycloalkyl with 1 to 9 fluorine, chlorine and/or bromine atoms in each case,

R⁸ and R⁹, moreover, form a substituted, saturated heterocycle with 5 to 8 ring atoms together with the nitrogen atom to which they are bound, with single or multiple, the same or various substitution by halogen or C₁-C₄ alkyl, whereby the heterocycle can contain 1 or 2 additional, non-adjacent hetero atoms constituted by oxygen, sulfur or NR¹⁰,

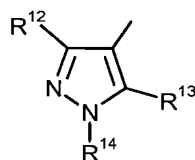
R¹⁰ stands for hydrogen or C₁-C₆ alkyl,

M stands in each case for a phenyl, pyridine or pyrimidine, pyridazine or pyrazine ring with a single substitution by R¹¹ or for a thiazole ring substituted by R^{11-A},

R¹¹ stands for hydrogen, fluorine, chlorine, methyl, isopropyl, methylthio or trifluoromethyl,

R^{11-A} stands for hydrogen, methyl, methylthio or trifluoromethyl,

A stands for the group of the formula (A1)



(A1), in which

R¹² stands for hydrogen, cyano, halogen, nitro, C₁-C₄ alkyl, C₁-C₄ alkoxy, C₁-C₄ alkylthio, C₃-C₆ cycloalkyl, C₁-C₄ haloalkyl, C₁-C₄ haloalkoxy or C₁-C₄ haloalkylthio, in each case with 1 to 5 halogen atoms, aminocarbonyl or aminocarbonyl-C₁-C₄-alkyl,

R¹³ stands for hydrogen, halogen, cyano, C₁-C₄ alkyl, C₁-C₄ alkoxy or C₁-C₄ alkylthio,

R¹⁴ stands for hydrogen, C₁-C₄ alkyl, hydroxy-C₁-C₄ alkyl, C₂-C₆ alkenyl, C₃-C₆ cycloalkyl, C₁-C₄-alkylthio-C₁-C₄-alkyl, C₁-C₄-alkoxy-C₁-C₄-alkyl, C₁-C₄ haloalkyl, C₁-C₄-haloalkylthio-C₁-C₄-alkyl, C₁-C₄-haloalkoxy-C₁-C₄-alkyl in each case with 1 to 5 halogen atoms, or phenyl,

or

A stands for the group of the formula (A2)



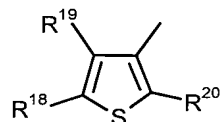
(A2), in which

R^{15} and R^{16} stand independently of one another for hydrogen, halogen, C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

R^{17} stands for halogen, cyano or C_1 - C_4 alkyl, or C_1 - C_4 haloalkyl or C_1 - C_4 haloalkoxy with 1 to 5 halogen atoms in each case,

5 or

A stands for the group of the formula (A3)



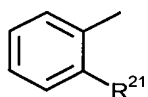
(A3), in which

R^{18} and R^{19} stand independently of one another for hydrogen, halogen, C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

10 R^{20} stands for hydrogen, halogen, C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

or

A stands for the group of the formula (A4)

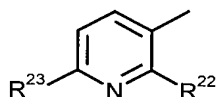


(A4), in which

15 R^{21} stands for hydrogen, halogen, hydroxy, cyano, C_1 - C_6 alkyl, C_1 - C_4 haloalkyl, C_1 - C_4 haloalkoxy or C_1 - C_4 haloalkylthio in each case with 1 to 5 halogen atoms,

or

A stands for the group of the formula (A5)



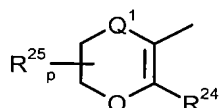
(A5), in which

20 R^{22} stands for halogen, hydroxy, cyano, C_1 - C_4 alkyl, C_1 - C_4 alkoxy, C_1 - C_4 alkylthio, C_1 - C_4 haloalkyl, C_1 - C_4 haloalkylthio or C_1 - C_4 haloalkoxy in each case with 1 to 5 halogen atoms,

25 R^{23} stands for hydrogen, halogen, cyano, C_1 - C_4 alkyl, C_1 - C_4 alkoxy, C_1 - C_4 alkylthio, C_1 - C_4 haloalkyl, C_1 - C_4 haloalkoxy in each case with 1 to 5 halogen atoms, C_1 - C_4 alkylsulfinyl or C_1 - C_4 alkylsulfonyl,

or

A stands for the group of the formula (A6)



(A6), in which

R^{24} stands for C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

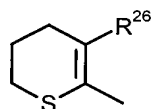
R^{25} stands for C_1 - C_4 alkyl,

Q^1 stands for S (sulfur), O (oxygen), SO, SO_2 or CH_2 ,

p stands for 0, 1 or 2, whereby R^{25} stands for identical or various groups if p is 2,

or

A stands for the group of the formula (A7)

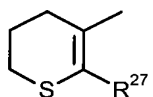


(A7), in which

R^{26} stands for C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

or

A stands for the group of the formula (A8)

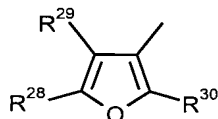


(A8), in which

R^{27} stands for C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

or

A stands for the group of the formula (A9)



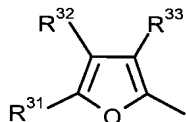
(A9), in which

R^{28} and R^{29} stand independently of one another for hydrogen, halogen, amino, C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

R^{30} stands for hydrogen, halogen, C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

or

A stands for the group of the formula (A10)



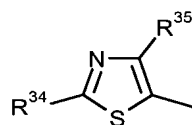
(A10), in which

R^{31} and R^{32} stand independently of one another for hydrogen, halogen, amino, nitro, C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

R^{33} stands for hydrogen, halogen, C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

or

A stands for the group of the formula (A11)



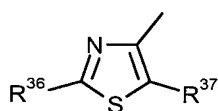
(A11), in which

R^{34} stands for hydrogen, halogen, amino, C_1 - C_4 alkylamino, di-(C_1 - C_4 alkyl)amino, cyano, C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

5 R^{35} stands for halogen, C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

or

A stands for the group of the formula (A12)



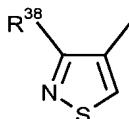
(A12), in which

10 R^{36} stands for hydrogen, halogen, amino, C_1 - C_4 alkylamino, di-(C_1 - C_4 alkyl)amino, cyano, C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

R^{37} stands for halogen, C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

15 or

A stands for the group of the formula (A13)

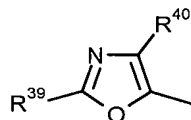


(A13), in which

R^{38} stands for halogen, C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

20 or

A stands for the group of the formula (A14)



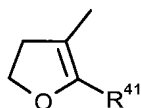
(A14), in which

R^{39} stands for hydrogen or C_1 - C_4 alkyl,

R^{40} stands for halogen or C_1 - C_4 alkyl,

25 or

A stands for the group of the formula (A15)

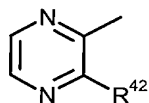


(A15), in which

R^{41} stands for C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

or

A stands for the group of the formula (A16)

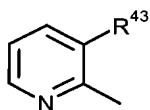


(A16), in which

R^{42} stands for hydrogen, halogen, C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

or

A stands for the group of the formula (A17)

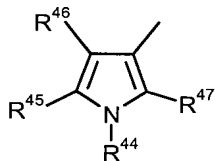


(A17), in which

R^{43} stands for halogen, hydroxy, C_1 - C_4 alkyl, C_1 - C_4 alkoxy, C_1 - C_4 alkylthio, C_1 - C_4 haloalkyl, C_1 - C_4 haloalkylthio or C_1 - C_4 haloalkoxy with 1 to 5 halogen atoms in each case,

or

A stands for the group of the formula (A18)



(A18), in which

R^{44} stands for hydrogen, cyano, C_1 - C_4 alkyl, C_1 - C_4 haloalkyl with 1 to 5 halogen atoms, C_1 - C_4 -alkoxy- C_1 - C_4 alkyl, hydroxy- C_1 - C_4 alkyl, C_1 - C_4 alkylsulfonyl, di(C_1 - C_4 alkyl)aminosulfonyl, C_1 - C_6 alkylcarbonyl or in each case possibly substituted phenylsulfonyl or benzoyl,

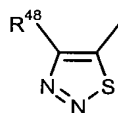
R^{45} stands for hydrogen, halogen, C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

R^{46} stands for hydrogen, halogen, cyano, C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

R^{47} stands for hydrogen, halogen, C_1 - C_4 alkyl or C_1 - C_4 haloalkyl with 1 to 5 halogen atoms,

or

A stands for the group of the formula (A19)



(A19), in which

R^{48} stands for C_1 - C_4 alkyl.

2. Haloalkyl carboxamides of the formula (I) according to Claim 1, in which

5 R stands for hydrogen, fluorine, chlorine or bromine,

R^1 stands for hydrogen or methyl,

R^2 stands for methyl, ethyl or in each case for methyl, ethyl, n- or isopropyl, n-, iso-, sec or tert-butyl with single or multiple, the same or various, substitution by fluorine, chlorine or bromine.

10 R^3 stands for fluorine, chlorine, bromine, iodine or in each case for methyl, ethyl, n- or isopropyl, n-, iso-, sec or tert-butyl with single or multiple, the same or various, substitution by fluorine, chlorine or bromine.

R^4 stands for hydrogen, C_1 - C_4 alkyl, C_1 - C_4 alkylsulfinyl, C_1 - C_4 alkylsulfonyl, C_1 - C_4 -alkoxy- C_1 - C_4 -alkyl, C_3 - C_6 cycloalkyl; C_1 - C_4 haloalkyl, C_1 - C_4 haloalkylthio, C_1 - C_4 haloalkylsulfinyl, C_1 - C_4 haloalkylsulfonyl, halo- C_1 - C_3 -alkoxy- C_1 - C_3 -alkyl, C_3 - C_8 halocycloalkyl with 1 to 9 fluorine, chlorine and/or bromine atoms in each case; formyl, formyl- C_1 - C_3 -alkyl, (C_1 - C_3 alkyl)carbonyl- C_1 - C_3 -alkyl, (C_1 - C_3 alkoxy)carbonyl- C_1 - C_3 -alkyl; halo-(C_1 - C_3 alkyl)carbonyl- C_1 - C_3 -alkyl, halo-(C_1 - C_3 alkoxy)carbonyl- C_1 - C_3 -alkyl with 1 to 13 fluorine, chlorine and/or bromine atoms in each case;

20 (C_1 - C_6 alkyl)carbonyl, (C_1 - C_4 alkoxy)carbonyl, (C_1 - C_3 -alkoxy- C_1 - C_3 -alkyl)carbonyl, (C_3 - C_6 cycloalkyl)carbonyl; (C_1 - C_4 haloalkyl)carbonyl, (C_1 - C_4 haloalkoxy)carbonyl, (halo- C_1 - C_3 -alkoxy- C_1 - C_3 -alkyl)carbonyl, (C_3 - C_6 halocycloalkyl)carbonyl with 1 to 9 fluorine, chlorine and/or bromine atoms in each case; or $-C(=O)C(=O)R^5$, $-CONR^6R^7$ or $-CH_2NR^8R^9$,

25 R^5 stands for hydrogen, C_1 - C_6 alkyl, C_1 - C_4 alkoxy, C_1 - C_3 -alkoxy- C_1 - C_3 -alkyl, C_3 - C_6 cycloalkyl; C_1 - C_4 haloalkyl, C_1 - C_4 haloalkoxy, halo- C_1 - C_3 -alkoxy- C_1 - C_3 -alkyl, C_3 - C_6 halocycloalkyl with 1 to 9 fluorine, chlorine and/or bromine atoms in each case,

30 R^6 and R^7 stand independently of one another in each case for hydrogen, C_1 - C_6 alkyl, C_1 - C_3 -alkoxy- C_1 - C_3 -alkyl, C_3 - C_6 cycloalkyl; C_1 - C_4 haloalkyl, halo- C_1 - C_3 -alkoxy- C_1 - C_3 -alkyl, C_3 - C_6 halocycloalkyl with 1 to 9 fluorine, chlorine and/or bromine atoms in each case,

35 R^6 and R^7 , moreover, form a substituted, saturated heterocycle with 5 to 8 ring atoms together with the nitrogen atom to which they are bound, with single or multiple, the same or various substitution by halogen or C_1 - C_4 alkyl, whereby the

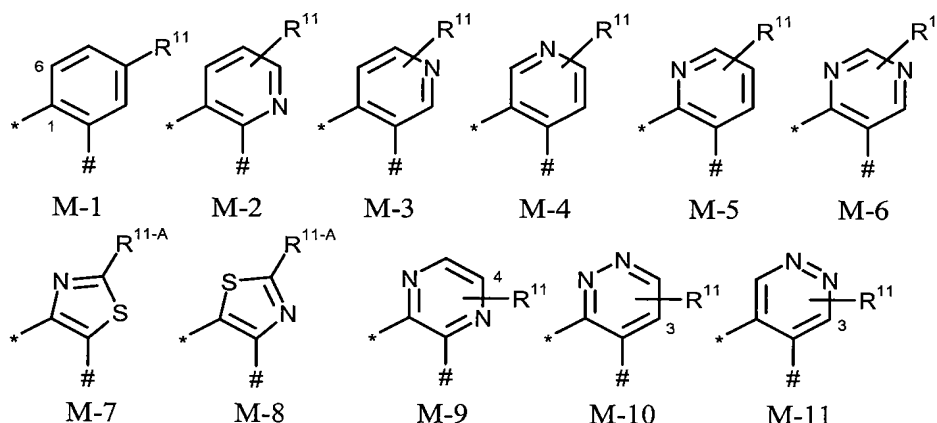
heterocycle can contain 1 or 2 additional, non-adjacent hetero atoms constituted by oxygen, sulfur or NR¹⁰,

R⁸ and R⁹ stand independently of one another for hydrogen, C₁-C₆ alkyl, C₃-C₆ cycloalkyl; C₁-C₄ haloalkyl, C₃-C₆ halocycloalkyl with 1 to 9 fluorine, chlorine and/or bromine atoms in each case,

R⁸ and R⁹, moreover, form a substituted, saturated heterocycle with 5 to 8 ring atoms together with the nitrogen atom to which they are bound, with single or multiple, the same or various substitution by halogen or C₁-C₄ alkyl, whereby the heterocycle can contain 1 or 2 additional, non-adjacent hetero atoms constituted by oxygen, sulfur or NR¹⁰,

R¹⁰ stands for hydrogen or C₁-C₄ alkyl,

M stands for one of the following cyclics

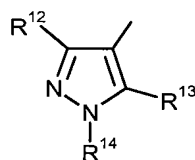


whereby the bond marked with an asterisk ("*") is a link with the amide, and the bond marked with "#" is a link with the haloalkyl group,

R¹¹ stands for hydrogen, fluorine, chlorine, methyl or trifluoromethyl,

R^{11-A} stands for hydrogen, methyl or trifluoromethyl,

A stands for the group of the formula (A1)



(A1), in which

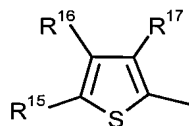
R¹² stands for hydrogen, cyano, fluorine, chlorine, bromine, iodine, methyl, ethyl, isopropyl, methoxy, ethoxy, methylthio, ethylthio, cyclopropyl, C₁-C₂ haloalkyl, C₁-C₂ haloalkoxy in each case with 1 to 5 fluorine, chlorine and/or bromine atoms, trifluoromethylthio, difluoromethylthio, aminocarbonyl, aminocarbonylmethyl or aminocarbonylethyl,

R^{13} stands for hydrogen, fluorine, chlorine, bromine, iodine, methyl, ethyl, methoxy, ethoxy, methylthio or ethylthio,

R^{14} stands for hydrogen, methyl, ethyl, n-propyl, isopropyl, C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms, hydroxymethyl, hydroxyethyl, cyclopropyl, cyclopentyl, cyclohexyl or phenyl,

or

A stands for the group of the formula (A2)



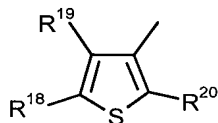
(A2), in which

R^{15} and R^{16} stand independently of one another for hydrogen, fluorine, chlorine, bromine, methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

R^{17} stands for fluorine, chlorine, bromine, cyano, methyl, ethyl, C_1 - C_2 haloalkyl or C_1 - C_2 haloalkoxy in each case with 1 to 5 fluorine, chlorine and/or bromine atoms,

or

A stands for the group of the formula (A3)



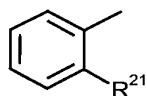
(A3), in which

R^{18} and R^{19} stand independently of one another for hydrogen, fluorine, chlorine, bromine, methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

R^{20} stands for hydrogen, fluorine, chlorine, bromine, methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

or

A stands for the group of the formula (A4)

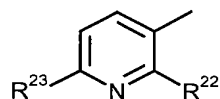


(A4), in which

R^{21} stands for hydrogen, fluorine, chlorine, bromine, iodine, hydroxy, cyano, C_1 - C_4 alkyl, C_1 - C_2 haloalkyl, C_1 - C_2 haloalkoxy or C_1 - C_2 haloalkylthio in each case with 1 to 5 fluorine, chlorine and/or bromine atoms,

or

A stands for the group of the formula (A5)



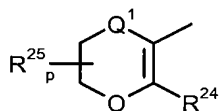
(A5), in which

R^{22} stands for fluorine, chlorine, bromine, iodine, hydroxy, cyano, C_1 - C_4 alkyl, methoxy, ethoxy, methylthio, ethylthio, difluoromethylthio, trifluoromethylthio, C_1 - C_2 haloalkyl or C_1 - C_2 haloalkoxy in each case with 1 to 5 fluorine, chlorine and/or bromine atoms,

R^{23} stands for hydrogen, fluorine, chlorine, bromine, iodine, cyano, C_1 - C_4 alkyl, methoxy, ethoxy, methylthio, ethylthio, C_1 - C_2 haloalkyl or C_1 - C_2 haloalkoxy in each case with 1 to 5 fluorine, chlorine and/or bromine atoms, C_1 - C_2 alkylsulfinyl or C_1 - C_2 alkylsulfonyl,

or

A stands for the group of the formula (A6)



(A6), in which

R^{24} stands for methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

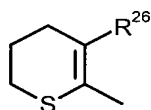
R^{25} stands for methyl or ethyl,

Q^1 stands for S (sulfur), SO_2 or CH_2 ,

p stands for 0 or 1,

or

A stands for the group of the formula (A7)

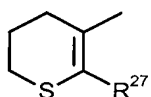


(A7), in which

R^{26} stands for methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

or

A stands for the group of the formula (A8)

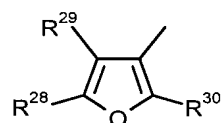


(A8), in which

R^{27} stands for methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

or

A stands for the group of the formula (A9)



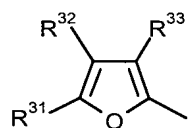
(A9), in which

R^{28} and R^{29} stand independently of one another for hydrogen, fluorine, chlorine, bromine, amino, methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

5 R^{30} stands for hydrogen, fluorine, chlorine, bromine, iodine, methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

or

A stands for the group of the formula (A10)



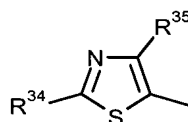
(A10), in which

10 R^{31} and R^{32} stand independently of one another for hydrogen, fluorine, chlorine, bromine, amino, nitro, methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

R^{33} stands for hydrogen, fluorine, chlorine, bromine, iodine, methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

15 or

A stands for the group of the formula (A11)



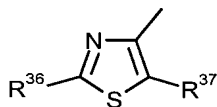
(A11), in which

20 R^{34} stands for hydrogen, fluorine, chlorine, bromine, amino, C_1 - C_4 alkylamino, di(C_1 - C_4 alkyl)amino, cyano, methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

R^{35} stands for fluorine, chlorine, bromine, methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

or

A stands for the group of the formula (A12)



(A12), in which

25 R^{36} stands for hydrogen, fluorine, chlorine, bromine, amino, C_1 - C_4 alkylamino, di(C_1 - C_4 alkyl)amino, cyano, methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

R^{37} stands for fluorine, chlorine, bromine, methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

or

A stands for the group of the formula (A13)

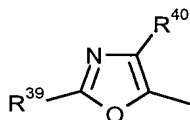


(A13), in which

R^{38} stands for fluorine, chlorine, bromine, methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

or

A stands for the group of the formula (A14)



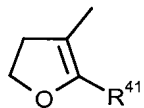
(A14), in which

R^{39} stands for hydrogen, methyl or ethyl,

R^{40} stands for fluorine, chlorine, bromine, methyl or ethyl,

or

A stands for the group of the formula (A15)

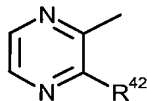


(A15), in which

R^{41} stands for methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

or

A stands for the group of the formula (A16)

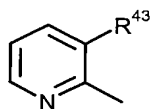


(A16), in which

R^{42} stands for hydrogen, fluorine, chlorine, bromine, methyl, ethyl or C_1 - C_2 haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

or

A stands for the group of the formula (A17)



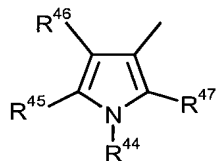
(A17), in which

R^{43} stands for fluorine, chlorine, bromine, iodine, hydroxy, C_1 - C_4 alkyl, methoxy, ethoxy, methylthio, ethylthio, difluoromethylthio,

trifluoromethylthio, C₁-C₂ haloalkyl or C₁-C₂ haloalkoxy in each case with 1 to 5 fluorine, chlorine and/or bromine atoms,

or

A stands for the group of the formula (A18)



(A18), in which

R⁴⁴ stands for hydrogen, methyl, ethyl, C₁-C₂ haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms, C₁-C₄-alkoxy-C₁-C₄-alkyl, hydroxymethyl, hydroxyethyl, methylsulfonyl or dimethylaminosulfonyl,

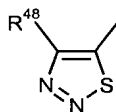
R⁴⁵ stands for hydrogen, fluorine, chlorine, bromine, methyl, ethyl or C₁-C₂ haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

R⁴⁶ stands for hydrogen, fluorine, chlorine, bromine, iodine, cyano, methyl, ethyl, isopropyl or C₁-C₂ haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

R⁴⁷ stands for hydrogen, fluorine, chlorine, bromine, methyl, ethyl or C₁-C₂ haloalkyl with 1 to 5 fluorine, chlorine and/or bromine atoms,

or

A stands for the group of the formula (A19)

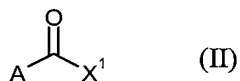


(A19), in which

R⁴⁸ stands for methyl, ethyl, n-propyl or isopropyl.

3. A process for synthesizing haloalkyl carboxamides of the formula (I) according to Claim 1, characterized in that

a) carboxylic acid derivatives the formula (II)

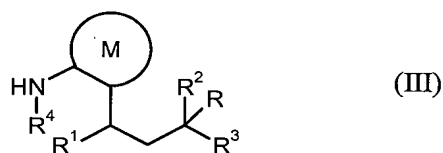


in which

A has the meanings specified in Claim 1 and

X¹ stands for halogen or hydroxy,

are reacted with aniline derivatives of the formula (III)



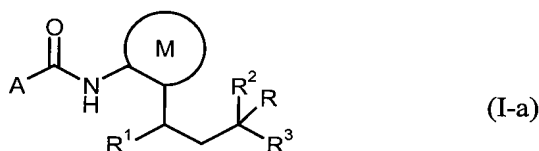
in which

R, R¹, R², R³, R⁴ and M have the meanings specified in Claim 1,

possibly in the presence of a catalyst, possibly in the presence a condensation agent, possibly in the presence of an acid binder and possibly in the presence of a diluent,

or

b) hexylcarboxanilides of the formula (I-a)



in which

R, R¹, R², R³, M and A have the meanings specified in Claim 1,

are reacted with halides of the formula (IV)



in which

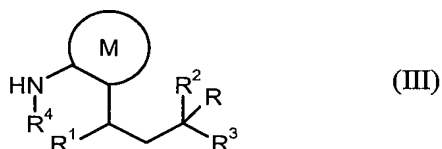
X² stands for chlorine, bromine or iodine,

R^{4-A} stands for C₁-C₈ alkyl, C₁-C₆ alkylsulfinyl, C₁-C₆ alkylsulfonyl, C₁-C₄ alkoxy, C₁-C₄ alkyl, C₃-C₈ cycloalkyl; C₁-C₆ haloalkyl, C₁-C₄ haloalkylthio, C₁-C₄ haloalkylsulfinyl, C₁-C₄ haloalkylsulfonyl, halo-C₁-C₄-alkoxy-C₁-C₄-alkyl, C₃-C₈ halocycloalkyl with 1 to 9 fluorine, chlorine and/or bromine atoms in each case; formyl, formyl-C₁-C₃-alkyl, (C₁-C₃ alkyl)carbonyl-C₁-C₃-alkyl, (C₁-C₃ alkoxy)carbonyl-C₁-C₃-alkyl; halo-(C₁-C₃ alkyl)carbonyl-C₁-C₃-alkyl, halo-(C₁-C₃ alkoxy)carbonyl-C₁-C₃-alkyl with 1 to 13 fluorine, chlorine and/or bromine atoms in each case; (C₁-C₈ alkyl)carbonyl, (C₁-C₈ alkoxy)carbonyl, (C₁-C₄-alkoxy-C₁-C₄-alkyl)carbonyl, (C₃-C₈ cycloalkyl)carbonyl; (C₁-C₆ haloalkyl)carbonyl, (C₁-C₆ haloalkoxy)carbonyl, (halo-C₁-C₄-alkoxy-C₁-C₄-alkyl)carbonyl, (C₃-C₈ halocycloalkyl)carbonyl with 1 to 9 fluorine, chlorine and/or bromine atoms in each case; or -C(=O)C(=O)R⁵, -CONR⁶R⁷ or -CH₂NR⁸R⁹,

whereby R⁵, R⁶, R⁷, R⁸ and R⁹ have the meanings specified in Claim 1,

in the presence of a base and in the presence of a dilution medium.

4. Media for combating undesirable microorganisms, characterized by containing at least one haloalkyl carboxamide of the formula (I) according to Claim 1 together with extenders and/or surface-active materials.
5. The use of haloalkyl carboxamides of the formula (I) according to Claim 1 to combat undesirable microorganisms.
6. Processes for combating undesired microorganisms, characterized in that haloalkyl carboxamides of the formula (I) are applied to the microorganisms and/or their environment in accordance with Claim 1.
7. Processes for synthesizing materials to combat undesired microorganisms, characterized in that haloalkyl carboxamides of the formula (I) are mixed with extenders and/or surface-active materials according to Claim 1.
8. Aniline derivatives of the formula (III)



in which R, R¹, R², R³, R⁴ and M have the meanings specified in Claim 1.